

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
DANIEL J. LONG
BAE SYSTEMS INFORMATION AND ELECTRONIC
SYSTEMS INTEGRATION INC.
65 SPIT BROOK ROAD
NASHUA, NH 03060

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 20040136 PCT		Date of mailing (day/month/year) 18 MAY 2007
FOR FURTHER ACTION See paragraph 2 below		
International application No. PCT/US05/40876	International filing date (day/month/year) 10 November 2005 (10.11.2005)	Priority date (day/month/year) 10 November 2004 (10.11.2004)
International Patent Classification (IPC) or both national classification and IPC IPC: H04B 1/38(2006.01) USPC: 455/90.1		
Applicant BAE SYSTEMS INFORMATION AND ELECTRONIC SYSTEMS INTEGRATION INC.		

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 11 April 2007 (11.04.2007)	Authorized officer George Eng Jacqueline A. Whitfield Special Project Asst. Telephone No. 571-272-2600
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Form PCT/ISA/237 (cover sheet) (April 2005)

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US05/40876

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
- ☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper
- ☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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International application No.
PCT/US05/40876

Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Claims 1-20 YES
Claims NONE NO

Inventive step (IS)

Claims NONE YES
Claims 1-20 NO

Industrial applicability (IA)

Claims 1-20 YES
Claims NONE NO

2. Citations and explanations:

Please See Continuation Sheet

WRITTEN OPINION OF THE
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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

Claims 1, 5-6, 8-10, 14, 16-19 lack an inventive step under PCT Article 33(3) as being obvious over Grajales et al. (US 2003/0214408 hereinafter Grajales) in view of Yang (US 2004/0185902).

Regarding claims 1, 10, 14, and 19, Grajales et al. (US 2003/0214408) discloses apparel having multiple alternative sensors (title). In the scope of the invention, a processing and evaluation unit (module) serves to receive sensor inputs from various sensors (coupling sensor data to module) (page 3, paragraph 29). In an exemplary embodiment, the processing and evaluation unit is integrated in a hand-held two-way radio that includes an appropriate transceiver, which transmits the sensor data to another radio unit (node) mounted in a nearby vehicle or as provided in a distant communications facility such as a public safety dispatch communications center (means at a node for downloading sensor data) (page 5, paragraph 48).

However, Grajales et al. does not explicitly disclose that the processing and evaluation unit is capable of converting audio information from the transceiver to the format and frequency of the temporary incident network. Yang (US 2004/0185902) discloses a combined and standalone hand held mobile communications system (title). In the scope of the invention, a main unit (transceiver) is coupled to an input/output interface (module) (figure 1, items 100, 200). The input/output interface allows the main unit to communicate with another communication system (page 1, paragraph 9). Therefore it would have been obvious to one of ordinary skill in the art to modify the processing and evaluation unit of Grajales et al. to include the capability of converting frequencies of different networks, as taught by Yang, in order to allow the two-way radio to communicate with different networks. By expanding the communication capability of the two-way radio, advantages would be evident to one of ordinary skill in the art such as improving the flexibility and range of use of the two-way radio.

Regarding claim 5, the invention of Grajales et al. is not limited to the type of sensor (page 3, paragraphs 25-27).

Regarding claim 6, Grajales et al. teaches that the sensor data can be downloaded by a public dispatch communications center. One of ordinary skill in the art would recognize that these centers are equipped with displays that allow a worker of the center to view the downloaded sensor data.

Regarding claim 8, the limitations are rejected as applied to claim 1. Furthermore, it is well known in the art that two-way radios comprise "push to talk" buttons.

Regarding claim 9, Yang teaches that the same battery may be used to power both the main unit and the input/output interface (page 3, paragraph 23).

Regarding claims 16 and 17, Grajales et al. teaches that the sensors utilize wireless communications to network with the two-way radio (page 2, paragraph 18).

Regarding claim 18, Yang teaches that both the main unit and the input/output interface may be used as a standalone unit (page

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1, paragraph 5).

Claims 2-4, 7, 11-13, 15 and 20 lack an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph and further in view of Dempksi (US 2004/0183751).

Regarding claims 2, 3, 4, 12, 13, 15, the combination of Grajales et al. and Yang discloses the limitations set forth in claim 1, but does not explicitly disclose a camera at the module. Dempksi (US 2004/0183751) discloses a system and method for displaying data within view of a wearable camera worn by a human worker (abstract). In the scope of the invention, a camera is connected to a wearable computer, which includes a wireless transmitter and antenna for wireless connectivity to a computer network (page 1, paragraphs 9, 10 and figure 1). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Grajales et al. and Yang to include a camera, as taught by Dempksi, in order to monitor the movement of a user. This modification allows an outside entity to coordinate the movement of the user.

Regarding claim 7, Dempksi teaches location monitoring of users wearing the system (page 4, paragraph 27).

Regarding claim 11, Dempksi teaches that multiple user profiles may be stored for each individual (page 2, paragraph 19).

Regarding claim 20, the limitations lack an inventive step as applied to claim 7.

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